Course title: Computer Networks 2
Course code: 50054
ECTS credits: 6
Requirements: None
Basic information
Level of studies: Undergraduate applied studies
Year of study: 3
Trimester: 8
Goal: Training students to use network devices for computer network administration as well as to configure and maintain routers, switches and routing protocols. Students should be able to independently solve complex problems related to computer network administration.
Outcome: Upon completion of the course, students should be able to independently configure and maintain routers and switches as well as to recognize, locate and eliminate errors in a configured local computer network.
Contents of the course
Theoretical instruction
1. Configuring dynamic routing protocols
2. OSPF
3. EIGRP
4. Configuring VLANs on switches and implementing Inter VLAN routing
5. Configuring access lists
6. Configuring DHCP
7. Configuring NAT
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Access lists
2. Router commands and switch operating system
3. Configuring OSPF routing protocols
4. Configuring EIGRP routing protocols
5. Configuring standard access lists
6. Configuring extended access lists

7. Configuring VLANs
8. Configuring inter VLANs routing
9. Configuring DHCP on a router
10. Configuring NAT
Textbooks and References
1. J. F. Kurose, K. W. Ross, Умрежавање рачунара од врха ка дну са Интернетом у фокусу, превод шестог издања, РАФ Рачунарски факултет, Београд, CET Computer Equipment and Trade, Београд, 2013, оригинално издање: Computer Networking: A Top-Down Approach Featuring the Internet, Rearson Education, Inc., 2013.
2. W. Odom, "CCNA Routing and Switching 200-125 Official Cert Guide Library", Cisco Press, 2016, ISBN-10: 1-58720-581-5
3. Cisco Networking Academy, "Connecting Networks Companion Guide", Cisco Press, 2014, ISBN-10: 1-58713-332-6
4. M. Pavlović, M. Kragović, M. Zajeganović, "Praktikum iz računarskih mreža", Visoka ICT škola, Beograd 2013
Number of active classes (weekly)
Lectures: 3
Practical classes: 3
Other types of classes: 1
Grading (maximum number of points: 100)
Pre-exam obligations: Points
Activities during lectures: 10
Activities on practical exercises: 60
Seminary work: 0
Colloquium: 0
Final exam: Points
Written exam: 30
Oral exam: 0
Lecturer: Milan Pavlović, PhD
Associate: Nikola Kurbalija